

The State of New Hampshire

Department of Environmental Services



Michael P. Nolin Commissioner

August 23, 2005

LETTER OF DEFICIENCY #WSEB 05-119 Certified Mail # 7099 3400 0003 0690 1711

William MacDonald Town of Canaan PO Box 38 Canaan, NH 03741

Subject: Canaan – Public Water System: Canaan Water Department (EPA# 0351010)

Dear Mr. MacDonald:

The records of the NH Department of Environmental Services (DES) show that the Canaan Water Department (CWD) water system is classified as a public water system (PWS), as defined by RSA 485:1-a. A PWS is defined as any water system supplying 15 or more services, or 25 or more people for 60 or more days per year. The CWD injects sodium hypochlorite into the drinking water as a disinfectant to provide bacteriological protection to consumers. As a result, the CWD is required to submit water samples for Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5) analyses to the State laboratory or a State-certified laboratory in compliance with NH Administrative Rule Env-Ws 382, Disinfectant/Disinfection Byproducts Rule.

Pursuant to Env-Ws 317.70, the maximum contaminant levels (MCLs) for TTHMs and HAA5s are 0.080 mg/L and 0.060 mg/L, respectively. Pursuant to Env-Ws 382.16, compliance with the MCLs for TTHMs and HAA5s is determined by calculating the running annual averages, computed quarterly, of quarterly averages of all samples collected. The system's running annual average for TTHMs was 0.092 mg/L for the fourth quarter of 2004. The system's running annual average for HAA5s was 0.070 mg/L for the first quarter of 2005 and 0.084 mg/L for the second quarter of 2005. Thus, the CWD has incurred three Disinfectant/Disinfection Byproduct Rule MCL violations since the fourth quarter of 2004.

It is DES' understanding that there is currently an on-going pilot study of CWD's slow-sand filtration facility. This pilot study is to investigate alternative modifications to the existing slow sand filter that may reduce the potential formation of disinfection byproducts in the water system.

DES believes the MCL violations can be corrected and future violations prevented by taking the following actions:

- 1. As soon as possible, but no later than August 28, 2005, provide public notice of the second quarter 2005 HAA5 MCL violation, as requested in the Notice of Violation dated July 28, 2005; and
- 2. Within 10 days of providing public notice of the second quarter 2005 HAA5 MCL violation, submit proof of public notice to DES; and
- 3. Within 10 days of receiving the report of the result's of the pilot study, forward a copy of the report to DES for review; and
- 4. Within 30 days of receiving the report of the results of the pilot study, meet with DES staff to discuss the report, the need to retain the services of a qualified consultant and/or perform additional studies of the water system, and an implementation schedule to correct the water quality violations; and

DES Web site: www.des.nh.gov

- 5. Within 45 days of the meeting requested above, submit to DES an implementation schedule with milestone dates and a final completion date. Upon approval by DES, the implementation schedule shall be incorporated by reference into this Letter of Deficiency; and
- 6. By the DES submission date established in the above-mentioned approval letter, if appropriate, submit to DES all engineering/technical documents. DES must review and approve, in writing, any engineering/technical documents prior to the commencement of any work on the system. Note that engineering plans for systems serving more than 50 service connections or 20,000 gpd must be stamped by a professional engineer; and
- 7. **By the DES-approved correction date**, take the corrective action as approved by DES. Notify DES in writing upon completion of the action(s) taken.

In the event compliance is not achieved within this period. DES may initiate formal action against the CWD, including issuing an order requiring the deficiencies to be corrected, initiating an administrative fine proceeding, and/or referring the matter to the NH Department of Justice for imposition of appropriate penalties.

All information as requested above should be addressed as follows or faxed to (603) 271-5171:

Alan Leach
Department of Environmental Services
Water Supply Engineering Bureau
29 Hazen Drive, PO Box 95
Concord, NH 03302-0095

Please be reminded that proposed treatment alternatives should take into consideration all water quality parameters as well as current and future quantity needs. In addition to your operator, assistance may be available to you through a variety of sources. DES Staff member Richard Skarinka, P.E., may be able to answer questions concerning treatment for TTHMs and HAA5s. He may be reached at (603) 271-2948 or via email at rskarinka@des.state.nh.us. Also, financial, managerial and technical assistance is available through either of two government funded technical assistance providers. These are NH Rural Water Association (1-800-556-3792) and RCAP Solutions, Inc. (1-800-488-1969). Health related questions may be directed to Dave Gordon of the DES Bureau of Environmental and Occupational Health whose number is (603) 271-4608. If you have any questions regarding this letter, please contact Alan Leach at (603) 271-2854 or by email at aleach@des.state.nh.us.

Sincerely

Sarah Pillsbury, P.G., Administrator Water Supply Engineering Bureau

cc: Gretchen R. Hamel, DES Legal Unit Administrator

Joseph Butterfield, Canaan Health Officer

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Joseph Damour, Primary Operator

EPA, Region 1

ec: Rick Skarinka, DES

Dave Gordon, DES BEOH

John Lukin, NHRWA

Robert Morancy, RCAP Solutions, Inc.